1,1		CITE I TO CYTE TO AND ADDRESS OF THE PERSON	10/390
***************************************		SEARCH REC	QUEST FORM 273 007
ه الله الله الله الله الله الله الله ال	Requester's Full Name: CEC	Ton In the	
RECEIVE	Art Unit: /4 24 Phon	Triuminor A. T. T. T.	Serial March
SEP 22 28	一一···································	*********	Serial Number: 105 90 86 Results Format Preferred (olivie): PAPER D ***********************************
JVONEHAT	To ensure an afficient so so well	A GA GA CA CA B ME ME ME ME	强我前班班米米松米市的本本班本本班的本班的本班的东西的本班本班的
(STIC).	and danted several!	, presse attack a copy of the co	er sheet, civins, and abstract or like out the followings
	Title of Invention:	See Bi	b Dofa Sheet Mg
	Inventors (please provide full names):		" Sheet M9
	-		117
	Barliest Priority Date:	11	
A to regard the property and appearing	San Danish of St.	Section of the sectio	
· · · · · · · · · · · · · · · · · · ·	Please provide a detalleus aventent in sei elected spegies or structures, herwords, evans	atedistripter ameritesorities as specif	Acalguarpossible the subject matter to be peopled Little in tillets, and combine with the concent or with
	·	A PROPERTY OF THE PROPERTY OF	of a Constant.
	For Sequence Searches Only Please inclu- appropriate serial number.	de all perlinent information (par	end child, divisional, or issued putent numbers) along wies
	See all see see	A Ma	and activiously of issued patent numbers) along with
	the Claims allache	· Please do	Atucture search and
	uniter name Ge) reach,	Display result to show
	identification of sou	Man and Pic	month reserve tixhou
•	Structure of all the	vice and KN	, compound name &
	- Talket	ed composine	Display result to shoe to compound name & Search Compound
	of Formula I as	VANDIA DOD. S	ce ordiners placed.
	\mathcal{O}	or merceco.	- Jurious Blaich
		***	그러 그 그는 얼마를 하다.
. :			
	Page a no se	e K	4
	Material de la Caración de la Caraci	**************************************	*****************
•	STAFF USE ONLY	Type of Senich	Vendors and cost where applicable
	· Secrober:	+{\lambda Soquence (#)	STRDiefog
	Sparotter Phone #:	AA Sequessee (R)	Quartel/Orbit Loxia/Nexis
	Grander Location:	Shwotife (fi)	
	Dato Especifica Picked Upo	### ##################################	The state of the s
•		e en tenferfiettiggen	in-house sequence systems
,	Date Completed:	Littention	Commercial Oligenter Socre/Length
•	Searcher Prep & Royley Time:	Ruitlext	interference SPDI Ancode/Transl
			the state of the s
	Online Timer	Other	

STRUCTURE SEARCH

 \Rightarrow fil reg; d stat que 15; fil zcapl; d que nos 16; d ibib abs hitstr 16 1-11; fil hom

FILE 'REGISTRY' ENTERED AT 12:36:44 ON 22 SEP 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 SEP 2008 HIGHEST RN 1051326-19-2 DICTIONARY FILE UPDATES: 21 SEP 2008 HIGHEST RN 1051326-19-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

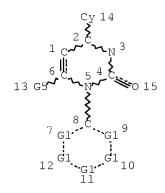
TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

L1 STR



VAR G1=C/N
VAR G5=C/NH2
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 1
CONNECT IS E3 RC AT 3
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 14
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 15 STEREO ATTRIBUTES: NONE

L5 397 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 94555 ITERATIONS

SEARCH TIME: 00.00.04

397 ANSWERS

FILE 'ZCAPLUS' ENTERED AT 12:36:45 ON 22 SEP 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS is strictly prohibited.

FILE COVERS 1907 - 22 Sep 2008 VOL 149 ISS 13 FILE LAST UPDATED: 21 Sep 2008 (20080921/ED)

ZCAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCAPLUS' FILE

L1 STR

L5 397 SEA FILE=REGISTRY SSS FUL L1 L6 11 SEA FILE=ZCAPLUS ABB=ON L5

L6 ANSWER 1 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:6179 ZCAPLUS Full-text

DOCUMENT NUMBER: 148:121717

TITLE: Preparation of 1,4-diaryldihydropyrimidin-2-ones for

treatment of pulmonary arterial hypertension.

INVENTOR(S): von Nussbaum, Franz; Gielen-Haertwig, Heike; Klein,

Martina; Li, Volkhart; Meibom, Daniel; Sandner, Peter;

Lustig, Klemens; Schaefer, Stefan

PATENT ASSIGNEE(S): Bayer Healthcare Aktiengesellschaft, Germany

SOURCE: Ger. Offen., 34pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ATENT	KIN	D	DATE			APPL	ICAT	DATE									
	DE 102006031314 WO 2008003412 W: AE, AG, AL, CH, CN, CO, GB, GD, GE,							20080103 20080110										
W	0 2008	0034	12		A1		2008	0.110		WO Z	UU / —.	EPSS	19		20070625			
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,	
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,	
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW					
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	
		GH,	GM,	KE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM										
PRIORI'	TY APP	LN.	INFO	.:						DE 2	006-	1020	0603	13142	A 2	0060	701	
OTHER	SOURCE	(S):			MARPAT 148:121717													

NAME)

GΙ

Use of title compds. [I; X = CH, N; R1 = (CH2)nCO2R1 3-CH2C6H4CO2R1a, 4-AB CH2C6H4CO2R1a; n = 1, 2; R1a = H, alkyl; R2 = cyano, COR2a, CO2R2a; R2a = (substituted) alkyl, cycloalkyl; R3 = H, R4 = H, F, C1; or R3 = F, C1 and R4 = H] for use in preparation of a drug for treatment of pulmonary arterial hypertension is claimed. Thus, 5-methylhexane-2,4-dione, 4formylbenzonitrile, and 1-[3-(trifluoromethyl)phenyl]urea were heated withpolyphosphoric acid in THF overnight at 80° to give a residue which was subjected to chiral chromatog. to give 8% 4-[(4R)-5-isobutyryl-6-methyl-2-isobutyryl-6-methyl-6oxo-1-[3-(trifluoromethyl)phenyl]-1,2,3,4-tetrahydropyrimidin-4yl]benzonitrile. I inhibited human neutrophil elastase with IC50 = 0.9-20 nM. 904958-43-6P 956487-28-8P 1000588-67-9P ΙT 1000588-70-4P 1000588-73-7P 1000588-74-8P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (preparation of diaryldihydropyrimidinones for treatment of pulmonary arterial hypertension) 904958-43-6 ZCAPLUS RN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX

Absolute stereochemistry.

RN 956487-28-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1000588-67-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclobutylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1000588-70-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclobutylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

RN 1000588-73-7 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(2-methyl-1-oxopropyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1000588-74-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(2-methyl-1-oxopropyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

IT 864150-67-4 864150-68-5 864250-45-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

RN 864150-67-4 ZCAPLUS

CN Benzoic acid, 3-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864150-68-5 ZCAPLUS

CN Benzoic acid, 4-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864250-45-3 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-[[2-(carboxymethoxy)ethoxy]carbonyl]-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

L6 ANSWER 2 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1300977 ZCAPLUS Full-text

DOCUMENT NUMBER: 147:522270

TITLE: Preparation of tetrahydropyrrolopyrimidinediones as

human neutrophil elastase (HNE) inhibitors

INVENTOR(S): Ray, Nicholas Charles; Finch, Harry; Edwards,

Christine; O'Connor, Elizabeth

PATENT ASSIGNEE(S): Argenta Discovery Limited, UK SOURCE: PCT Int. Appl., 73pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT		DATE				
WO	WO 2007129060						2007	1115	1	WO 2	007-	GB16:	20070503				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,
		GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,
		KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM									
PRIORIT	Y APP	LN.	INFO	.:					(GB 2	006-	8844			A 2	0060	504
									(GB 2	006-	1254	4		A 2	0060	623

OTHER SOURCE(S): MARPAT 147:522270

GΙ

$$R^{1}$$
 R^{2}
 R^{2}
 R^{3}
 R^{5}
 R^{5}
 R^{5}

Title compds. [I; A = aryl, heteroaryl; D = O, S; R1-R3 = H, OH, halo, NO2, cyano, alkenyl, alkynyl, alkenyloxy, (substituted) alkyl, alkoxy; R, R4 = Xm(A1)pQn(A2)q(X1)kZ; A1, A2 = (substituted) alkylene, alkenylene optionally containing O, S, NRa; Q = O, S, SO, SO2, NRa, NRaSO2, CO2, etc.; X = CO, SO2, CO2, CONRa, SO2NRa; Ra = H, alkyl, cycloalkyl; X1 = O, S, NH; Z = H,

(substituted) carbocyclyl, heterocyclyl; k, m, n, p, q=0, 1], were prepared Thus, title compound (II) was prepared in 3 steps from 3,5-difluorophenylurea, 4-cyanobenzaldehyde, Et acetoacetate, and methylamine. Most I inhibited HNE in the range of 1-50 nM.

IT 956487-15-3P 956487-16-4P 956487-17-5P 956487-18-6P 956487-19-7P 956487-20-0P 956487-21-1P 956487-22-2P 956487-23-3P 956487-28-8P 956487-29-9P 956487-38-0P 956487-39-1P 956487-40-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tetrahydropyrrolopyrimidinediones as human neutrophil elastase inhibitors)

RN 956487-15-3 ZCAPLUS

CN Piperidinium, 1,1-bis[3-[(6R)-4-(bromomethyl)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-, bromide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

● Br-

RN 956487-16-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[2,12-dioxo-7-[(2,2,2-trifluoroacetyl)amino]-3,6,8,11-tetraazatridec-6-ene-1,13-diyl]bis[4-(bromomethyl)-6-(4-cyanophenyl)-1,2,3,6-tetrahydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-,5,5'-diethyl ester, (6R,6'R)- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 956487-17-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(methylimino)di-3,1-propanediyl]bis[4-(bromomethyl)-6-(4-cyanophenyl)-1,2,3,6-tetrahydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 5,5'-diethyl ester, (6R,6'R)- (CA INDEX NAME)

RN 956487-18-6 ZCAPLUS

CN 1(2H)-Pyrimidinepropanaminium, 4-(bromomethyl)-N-[3-[(6R)-4-(bromomethyl)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-N,N-dimethyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, iodide (1:1), (6R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

• I -

RN 956487-19-7 ZCAPLUS

CN 1H-Imidazolium, 1,3-bis[3-[(6R)-4-(bromomethyl)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-, bromide (1:1) (CA INDEX NAME)

PAGE 2-A

● Br-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 956487-20-0 ZCAPLUS

CN Pyrrolidinium, 1,1-bis[3-[(6R)-4-(bromomethyl)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-, bromide (1:1) (CA INDEX NAME)

PAGE 2-A

Br-

RN 956487-21-1 ZCAPLUS

CN Ethanaminium, 2-[[2-[(6R)-4-(bromomethyl)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[(6R)-4-(bromomethyl)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

___OEt

RN 956487-22-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

RN 956487-23-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 6-(bromomethyl)-4-(4-cyanophenyl)-3-[3-[[(1,1-dimethylethoxy)carbonyl]amino]propyl]-1,2,3,4-tetrahydro-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 956487-28-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 956487-29-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 4-(bromomethyl)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (6R)- (CA INDEX NAME)

RN 956487-38-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[5-(methylamino)pentyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 956487-39-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[5-[methyl(3-phenoxypropyl)amino]pentyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

$$F_{3}C$$

N

N

(CH₂) 5

N

(CH₂) 3

OPH

Eto

O

CN

RN 956487-40-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 6-(bromomethyl)-3-[5-[[3-(4-bromophenoxy)propyl]methylamino]pentyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN 2006:1356757 ZCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 146:100714

TITLE: Preparation of dihydropyrimidone multimers as human

neutrophil elastase inhibitors

INVENTOR(S): Finch, Harry; Edwards, Christine; Ray, Nicholas

Charles; Fitzgerald, Mary Frances

PATENT ASSIGNEE(S): Argenta Discovery Ltd., UK

PCT Int. Appl., 59pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE	
WO	2006	 1368	 57		A1	_	2006	1228		WO 2	006-	GB23.	37		2	 0060	626
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
	KR, KZ, MW, MX, MX, MX, MX, MX, MX, MX, MX, MX, MX		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
	GE, GH, GM,		HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,		
		KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,
		MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,
		SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VC,	VN,	ZA,	ZM,	ZW									
	RW:	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM										
EP	1893	584			A1		2008	0305		EP 2	006-	7556.	23		2	0060	626
	R:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	IE,
		IS,	ΙT,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
IN	2007	DN10	018		Α		2008	0711		IN 2	007-	DN10	018		2	0071	224
CN	1012	4305	5		Α		2008	0813		CN 2	006-	8003	0331		2	0080	220
PRIORIT	Y APP	LN.	INFO	.:						GB 2	005-	1294	0		A 2	0050	624
										WO 2	006-	GB23.	37		W 2	0060	626
OTHER S	OURCE	(S):			MAR:	PAT	146:	1007	14								

GΙ

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Title compds. represented by the formula M-L-M, wherein L is a linker and each M is independently a group of formula I [A = (hetero)aryl; D = O or S; R1-R3 = independently H, halo, nitro, etc.; R4 = OH, alkyl(carbonyl), amino, etc.; Y1-Y5 = independently C or N, with the proviso that the ring in which they are comprised contains no more than 2 N atoms; R5 = (un)substituted alkyl, -O-alkyl-O-alkyl or amino; R6 = halo, nitro, cyano, etc.; and pharmaceutically acceptable salts, solvates or N-oxides thereof], were prepared as human neutrophil elastase (HNE) inhibitors. For example, II was provided in a multi-step synthesis starting from the reaction of 3- (trifluoromethyl)phenylurea with 4-cyanobenzaldehyde. I were tested for inhibitory activity towards HNE with IC50 values of 1-1000 nM. Thus, I and their pharmaceutical compns. are useful as human neutrophil elastase inhibitors for the treatment of respiratory diseases (no data).
- IT 917813-97-9P 917813-99-1P 917814-01-8P 917814-02-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of dihydropyrimidone multimers as human neutrophil elastase inhibitors)

- RN 917813-97-9 ZCAPLUS
- CN 1(2H)-Pyrimidineacetic acid, 5,5'-[(methylimino)bis(3,1-propanediyliminocarbonyl)]bis[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1'-dimethyl ester, (6R,6'R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 917813-99-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5,5'-[(methylimino)bis(3,1-propanediyliminocarbonyl)]bis[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R,6'R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 917814-01-8 ZCAPLUS

CN 1-Propanaminium, 3-[[(4R)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-(2-methoxy-2-oxoethyl)-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]amino]-N-[3-[[(4R)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-(2-methoxy-2-oxoethyl)-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]amino]propyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

PAGE 1-B

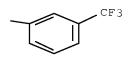
RN 917814-02-9 ZCAPLUS

CN 1-Propanaminium, 3-[[(4R)-3-(carboxymethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]amino]-N-[3-[[(4R)-3-(carboxymethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]amino]propyl]-N,N-dimethyl-, chloride (1:1) (CA INDEX NAME)

Absolute stereochemistry.

● C1-

PAGE 1-B



IT 917814-00-7P 917814-03-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dihydropyrimidone multimers as human neutrophil elastase inhibitors)

RN 917814-00-7 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 5,5'-[(methylimino)bis(3,1-propanediyliminocarbonyl)]bis[6-(4-cyanophenyl)-N-[2-(dimethylamino)ethyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R,6'R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 917814-03-0 ZCAPLUS

CN 1-Propanaminium, 3-[[(4R)-4-(4-cyanophenyl)-3-[2-[[2-(dimethylamino)ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]amino]-N-[3-[[[(4R)-4-(4-cyanophenyl)-3-[2-[[2-(dimethylamino)ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]amino]propyl]-N,N-dimethyl-, chloride (1:1) (CA INDEX NAME)

● c1-

PAGE 1-B

IT 917814-23-4P 917814-24-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dihydropyrimidone multimers as human neutrophil elastase inhibitors)

RN 917814-23-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-, methyl ester, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 917814-24-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-carboxy-6-(4-cyanophenyl)-3,6-dihydro-4-

methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1-methyl ester, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

$$_{\mathrm{F_{3}C}}$$
 $_{\mathrm{Me}}$ $_{\mathrm{Co_{2}H}}$ $_{\mathrm{CN}}$

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:796025 ZCAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 145:211067

TITLE: Multimers of tetrahydropyrimidinone compounds as

elastase inhibitors and their preparation,

pharmaceutical compositions, and use for treatment of

respiratory diseases

INVENTOR(S): Finch, Harry; Edwards, Christine; Ray, Nicholas

Charles; O'Connor, Elizabeth Anne; Fitzgerald, Mary F.

PATENT ASSIGNEE(S): Argenta Discovery Ltd, UK SOURCE: PCT Int. Appl., 132 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE				APPL	ICAT	DATE								
WO WO	2006 2006					A2 20060810 A3 20061012			WO 2006-GB361							20060203			
WO									D7	DD	DC	DD	DIA	DV	D7	C	CII		
	VV :	•		•	•		AU,	•	•	•	•		•	•	•	•	•		
					•		DE,				•								
					•		ID,				•								
		KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,		
		MZ,	NA,	NG,	NΙ,	NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,		
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,		
		VN,	YU,	ZA,	ZM,	ZW													
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,		
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,		
							GN,												
					•		NA,				•								
		•			RU,		•		,	,	,	,	,		,	,	,		
ΑIJ	2006	•			•		2006	0810		AU 2	006-		20060203						
	2595				A1		2006			CA 2									
	1856						2007			EP 2									
EE																			
	K:						CZ,										IE,		
	0000	•					LV,			•					•				
	2008						2008								20060203				
IN 2007DN05905							2007	0817		IN 2007-DN5905						20070727			

CN 101151252 A 20080326 CN 2006-80009856 20070926 PRIORITY APPLN. INFO.: GB 2005-2258 A 20050203 WO 2006-GB361 W 20060203

OTHER SOURCE(S): MARPAT 145:211067

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A compound of formula I is useful in therapy, e.g. of respiratory diseases. AB Compds. of formula I wherein L is a linker; each A are independently (un) substituted (hetero) aryl; D is O or S; each Y1 - Y5 are independently CH, CR3, CR6 or N, with the proviso that one of them is CR3, one CR6 and not more than two N per ring; each R3 are independently H, halo, NO2, CN, (un) substituted C1-6 alkyl, OH, or (un) substituted C1-6 alkoxy; each R4 are independently COCF3, (un)substituted C1-6 alkylcarbonyl, (un)substituted C1-6 alkoxycarbonyl, (un)substituted C1-6 alkenyloxycarbonyl, hydroxycarbonyl, CONH2 and derivs., (un)substituted (hetero)aroyl, etc.; each R5 are independently (un) substituted C1-4 alkyl or amino; each R6 are independently halo, NO2, CN, (un) substituted C1-6 alkyl, OH, or (un) substituted C1-6 alkoxy; and their pharmaceutically acceptable salts, solvates or N-oxides thereof are claimed. Example compound II was prepared by N-alkylation of compound III with 1,12-dibromododecane. The invention compds. were evaluated for their elastase inhibitory activity. The tested compds. were shown to have desirable HNE inhibitory activity (no data).

IT 904957-71-7P 904957-72-8P 904957-86-4P 904958-07-2P 904958-35-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate and intermediate; preparation of multimers of tetrahydropyrimidinone compds. as elastase inhibitors useful in the treatment of respiratory diseases)

RN 904957-71-7 ZCAPLUS

CN

5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

PAGE 1-B

RN 904957-72-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

PAGE 1-B

CF3

RN 904957-86-4 ZCAPLUS

CN Ethanaminium, 2-[[2-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[<math>2-[[2-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

 RN 904958-07-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(methylimino)di-5,1-pentanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-35-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(6-cyano-3-pyridinyl)-3-[2-[[2-[[2-[[2-[6-(6-cyano-3-pyridinyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

PAGE 1-B

```
904957-62-6P 904957-63-7P 904957-64-8P
ΙT
     904957-65-9P 904957-66-0P 904957-67-1P
     904957-68-2P 904957-69-3P 904957-70-6P
     904957-73-9P 904957-74-0P 904957-75-1P
     904957-76-2P 904957-77-3P 904957-78-4P
     904957-79-5P 904957-80-8P 904957-81-9P
     904957-83-1P 904957-84-2P 904957-85-3P
     904957-87-5P 904957-88-6P 904957-89-7P
     904957-90-0P 904957-91-1P 904957-92-2P
     904957-93-3P 904957-94-4P 904957-95-5P
     904957-96-6P 904957-97-7P 904957-98-8P
     904957-99-9P 904958-00-5P 904958-01-6P
     904958-02-7P 904958-03-8P 904958-04-9P
     904958-05-0P 904958-06-1P 904958-08-3P
     904958-09-4P 904958-10-7P 904958-11-8P
     904958-12-9P 904958-13-0P 904958-14-1P
     904958-15-2P 904958-16-3P 904958-17-4P
     904958-18-5P 904958-19-6P 904958-20-9P
     904958-21-0P 904958-22-1P 904958-23-2P
     904958-24-3P 904958-25-4P 904958-26-5P
     904958-27-6P 904958-28-7P 904958-30-1P
     904958-31-2P 904958-32-3P 904958-33-4P
     904958-34-5P 904958-36-7P 904958-37-8P
     904958-39-0P 904958-41-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; preparation of multimers of tetrahydropyrimidinone compds.
        as elastase inhibitors useful in the treatment of respiratory diseases)
     904957-62-6 ZCAPLUS
RN
     5-Pyrimidinecarboxylic acid, 1,1'-(1,12-dodecanediyl)bis[6-(4-cyanophenyl)-
CN
     1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl
     ester (9CI) (CA INDEX NAME)
```

RN 904957-63-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,9-nonanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904957-64-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,8-octanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904957-65-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,10-dioxo-1,10-decanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904957-66-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,9-dioxo-1,9-nonanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904957-67-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,12-dioxo-1,12-dodecanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904957-68-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[oxybis(2,1-ethanediyloxy-2,1-

ethanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904957-69-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[4-[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]-1-piperazinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904957-70-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[4-[2-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]-1-piperazinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

RN 904957-73-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[3-[[3-[[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]propyl]methylamino]propyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

PAGE 1-B

RN 904957-74-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[4-[2-[4-[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]-1-piperazinyl]ethyl]-1-piperazinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

RN 904957-75-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[4-[2-[4-[2-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]-1-piperazinyl]ethyl]-1-piperazinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

RN 904957-76-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[trans-4-[[5-[[trans-4-[[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]cyclohe xyl]amino]carbonyl]-2-pyridinyl]carbonyl]amino]cyclohexyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

Relative stereochemistry.

PAGE 1-B

PAGE 2-B

 $\int_{\Gamma} N$

RN 904957-77-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,5-pentanediylbis(imino-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

RN 904957-78-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,2-ethanediylbis(4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

RN 904957-79-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,2-ethanediylbis(4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904957-80-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(ethylimino)di-8,1-octanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904957-81-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(ethylimino)di-8,1-octanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904957-83-1 ZCAPLUS

CN 1H-Imidazolium, 1,3-bis[3-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 904957-82-0 CMF C53 H49 F6 N8 O6

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 14477-72-6 CMF C2 F3 O2

RN 904957-84-2 ZCAPLUS

CN 1H-Imidazolium, 1,3-bis[3-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-, bromide (1:1) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 904957-85-3 ZCAPLUS

CN Ethanaminium, 2-[[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

• I-

RN 904957-87-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,12-dodecanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, bis(2-hydroxyethyl) ester (9CI) (CA INDEX NAME)

RN 904957-88-6 ZCAPLUS

 (trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]-1-piperazinyl]ethyl]-1piperazinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3(trifluoromethyl)phenyl]-, 2-hydroxyethyl ester (CA INDEX NAME)

RN 904957-89-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[2-[6-(4-cyanophenyl)-3,6-dihydro-5-[(2-hydroxyethoxy)carbonyl]-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-hydroxyethyl ester (CA INDEX NAME)

PAGE 1-B

RN 904957-90-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(ethylimino)di-12,1-dodecanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, bis(2-hydroxyethyl) ester (9CI) (CA INDEX NAME)

— CH₂— CH₂— OH

RN 904957-91-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(ethylimino)di-8,1-octanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, bis(2-hydroxyethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-B

<u>— СН2</u>— ОН

RN 904957-92-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,2-ethanediylbis(4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, bis(2-hydroxyethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-B

RN 904957-93-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[[4-[[2-[[2-[[4-[[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]benzoyl]amino]ethyl]meth ylamino]ethyl]amino]carbonyl]phenyl]methyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

PAGE 1-A

RN 904957-94-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[[3-[[2-[[2-[[3-[[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]benzoyl]amino]ethyl]meth ylamino]ethyl]amino]carbonyl]phenyl]methyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

PAGE 1-B

RN

CN 5-Pyrimidinecarboxylic acid, 1,1'-[carbonimidoylbis(imino-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904957-96-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[carbonimidoylbis(imino-5,1-pentanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904957-97-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(7-imino-2,12-dioxo-3,6,8,11-tetraaza-1,13-tridecanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

PAGE 1-B

RN 904957-98-8 ZCAPLUS

CN Ethanaminium, 2,2'-[(methylimino)bis[2,1-ethanediylimino(2-oxo-2,1-ethanediyl)[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1,5(2H)-pyrimidinediyl]carbonyloxy]]bis[N,N,N-trimethyl-, diiodide (9CI) (CA INDEX NAME)

PAGE 1-B

RN 904957-99-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[2-[(6R)-6-(4-cyanophenyl)-5-[[2-(dimethylamino)ethoxy]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]met hylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(dimethylamino)ethyl ester, (4R)- (CA INDEX NAME)

PAGE 1-B

RN 904958-00-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[2-[[2-[[2-[[2-[[2-[[6R]-5-[[2-[(6R)-5-[[2-[(aminoiminomethyl)amino]ethoxy]carbonyl]-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-[(aminoiminomethyl)amino]ethyl ester, (4R)-(CA INDEX NAME)

$$H_{2N}$$
 H_{NH}
 H

PAGE 1-B

PAGE 2-B

 $\prod_{\rm N\,H}$

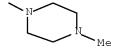
RN 904958-01-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, N,N'-[(methylimino)di-2,1-ethanediyl]bis[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-[(4-methyl-1-piperazinyl)carbonyl]-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R,6'R)- (9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

PAGE 2-B



- RN 904958-02-7 ZCAPLUS
- CN 1(2H)-Pyrimidineacetamide, N,N'-[(methylimino)di-2,1-ethanediyl]bis[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(1-piperazinylcarbonyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

PAGE 1-A

RN 904958-03-8 ZCAPLUS

CN Ethanaminium, 2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(1-piperazinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(1-piperazinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 904958-04-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[22-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]-10,13-bis[3-[[2-[[2-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]amino]-3-oxopropyl]-2,7,16,21-tetraoxo-3,6,10,13,17,20-hexaazadocos-1-yl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

NC-

PAGE 2-B

PAGE 3-A

RN 904958-05-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[2-[[5-[[3,5-bis[[[5-[[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]pentyl]amino]carbo nyl]benzoyl]amino]pentyl]amino]-2-oxoethyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-06-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[2-[[2-[[2-[[2-[[2-[3,6-dihydro-5-[(2-hydroxyethoxy)carbonyl]-4-methyl-6-(4-methylphenyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-4-(4-methylphenyl)-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-hydroxyethyl ester (CA INDEX NAME)

RN 904958-08-3 ZCAPLUS

CN 1(2H)-Pyrimidinepentanaminium, 6-(4-cyanophenyl)-N-[5-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]pentyl]-5-(ethoxycarbonyl)-3,6-dihydro-N,N,4-trimethyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, iodide (1:1), (6R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

● I -

RN 904958-09-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[3-[4-[3-[[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]propyl]-1-piperazinyl]propyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-10-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[4-[5-[4-[2-[6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]-1-piperazinyl]pentyl]-1-piperazinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-11-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,4-piperazinediyldi-3,1-propanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-12-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,5-pentanediylbis(4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-13-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[[1,1'-biphenyl]-4,4'-diylbis(carbonyl-4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

RN 904958-14-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[oxybis(4,1-phenylenecarbonyl-4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-15-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[[1,1'-biphenyl]-2,2'-diylbis(carbonyl-4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-16-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,2-phenylenebis(carbonyl-4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-17-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[[2,2'-bipyridin]-5,5'-diylbis(carbonyl-4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

RN 904958-18-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[3,5-pyridinediylbis(carbonyl-4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} \text{EtO-C} & \text{Me} \\ \text{NC} & \text{NC} & \text{CF3} \\ \text{NC} & \text{CH}_2)_3 \\ \\ \text{N} & \text{CH}_2)_3 \\ \\ \text{N} & \text{CH}_2)_3 \\ \\ \text{N} & \text{CO} & \text{CH}_2)_3 \\ \\ \text{N} & \text{CO} & \text{CH}_2)_3 \\ \\ \text{N} & \text{C} & \text{CO} & \text{C} \\ \\ \text{N} & \text{C} \\ \\ \text{C} & \text{C}$$

RN 904958-19-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(tetrahydro-1H-1,4-diazepine-1,4(5H)-diyl)di-3,1-propanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-20-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(methylimino)bis(2,1-ethanediylimino-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

RN 904958-21-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(ethylimino)di-2,1-ethanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-22-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[oxybis[2,1-ethanediyl(methylimino)-3,1-propanediyl]]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-23-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(4,13-dimethyl-7,10-dioxa-4,13-diazahexadecane-1,16-diyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)-(9CI) (CA INDEX NAME)

PAGE 1-B

RN 904958-24-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,4-butanediylbis[(methylimino)-3,1-propanediyl]]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

RN 904958-25-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,8-octanediylbis[(methylimino)-3,1-propanediyl]]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-26-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[(methylimino)di-2,1-ethanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

RN 904958-27-6 ZCAPLUS

CN 1(2H)-Pyrimidinepropanaminium, 6-(4-cyanophenyl)-N-[3-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-5-(ethoxycarbonyl)-3,6-dihydro-N,N,4-trimethyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, iodide (1:1), (6R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

• I -

RN 904958-28-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,12-dodecanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, bis[2-(dimethylamino)ethyl] ester, (6R,6'R)- (9CI) (CA INDEX NAME)

RN 904958-30-1 ZCAPLUS

CN Ethanaminium, 2-[[[(4R)-4-(4-cyanophenyl)-3-[12-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-5-[[2-(trimethylammonio)ethoxy]carbonyl]-1(2H)-pyrimidinyl]dodecyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]oxy]-N,N,N-trimethyl-, formate (1:2) (CA INDEX NAME)

CM 1

CRN 904958-29-8 CMF C62 H74 F6 N8 O6

Absolute stereochemistry.

CM 2

CRN 71-47-6 CMF C H O2

CN 5-Pyrimidinecarboxylic acid, 3-[2-[[2-[[2-[[2-[[2-[[6R)-5-(butoxycarbonyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, butyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

-- CF3

```
RN 904958-32-3 ZCAPLUS

CN Ethanaminium, 2-[[2-[(6R)-6-(4-cyanophenyl)-5-[[2-(dimethylamino)ethoxy]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[(6R)-6-(4-cyanophenyl)-5-[[2-(dimethylamino)ethoxy]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)
```

RN 904958-33-4 ZCAPLUS

CN Pyrrolidinium, 1,1-bis[3-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-, bromide (1:1) (CA INDEX NAME)

PAGE 2-A

● Br-

RN 904958-34-5 ZCAPLUS

CN Piperidinium, 1,1-bis[3-[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]propyl]-, bromide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

● Br-

RN 904958-36-7 ZCAPLUS

CN Ethanaminium, 2-[[2-[6-(6-cyano-3-pyridinyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[6-(6-cyano-3-pyridinyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

PAGE 1-A

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text{CH}_2 \\ \text{C} \\ \text{NH} \\ \text{CH}_2 \\$$

• I-

RN 904958-37-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(phenylmethoxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, phenylmethyl ester, (4R)- (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 904958-39-0 ZCAPLUS

CN Ethanaminium, 2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(phenylmethoxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(phenylmethoxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, formate (1:1) (CA INDEX NAME)

CM 1

CRN 904958-38-9 CMF C64 H58 F6 N9 O8

PAGE 1-B

$$-0$$
 Ph

CM 2

CRN 71-47-6 CMF C H O2

RN 904958-41-4 ZCAPLUS

CN Ethanaminium, 2-[[[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[[(6R)-6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, butanedioate (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 904958-40-3 CMF C54 H54 F6 N9 O8

PAGE 1-B

__OEt

CM 2

CRN 56-14-4 CMF C4 H4 O4

 $^-$ O $_2$ C — C H $_2$ — C H $_2$ — C O $_2$ $^-$

IT 904958-45-8P

as

RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of multimers of tetrahydropyrimidinone compds.

elastase inhibitors useful in the treatment of respiratory diseases)

RN 904958-45-8 ZCAPLUS
CN 5-Pyrimidinecarboxylic acid, 3-(3-bromopropyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

```
ΙT
    904958-43-6P 904958-44-7P 904958-46-9P
    904958-47-0P 904958-48-1P 904958-49-2P
    904958-51-6P 904958-52-7P 904958-53-8P
    904958-54-9P 904958-55-0P 904958-56-1P
    904958-57-2P 904958-58-3P 904958-59-4P
    904958-60-7P 904958-61-8P 904958-62-9P
    904958-63-0P 904958-64-1P 904958-65-2P
    904958-66-3P 904958-67-4P 904958-68-5P
    904958-69-6P 904958-70-9P 904958-71-0P
    904958-72-1P 904958-75-4P 904958-76-5P
    904958-77-6P 904958-79-8P 904958-80-1P
    904958-81-2P 904958-83-4P 904958-97-0P
    904958-98-1P 904958-99-2P 904959-00-8P
    904959-03-1P 904959-04-2P 904959-05-3P
    904959-06-4P 904959-08-6P 904959-16-6P
```

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of multimers of tetrahydropyrimidinone compds.

as

elastase inhibitors useful in the treatment of respiratory diseases)

RN 904958-43-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-44-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(3-bromopropyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-46-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-[3-(1H-imidazol-1-yl)propyl]-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

$$F_3C$$
 Me
 EtO
 CN
 CN

RN 904958-47-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-[3-(1H-imidazol-1-yl)propyl]-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-48-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(8-bromooctyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-49-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(8-bromooctyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-51-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-5-[(2-hydroxyethoxy)carbonyl]-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 904958-52-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-(1,12-dodecanediyl)bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, bis[2-[(tetrahydro-2H-pyran-2-yl)oxy]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 904958-53-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(12-bromododecyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-[(tetrahydro-2H-pyran-2-yl)oxy]ethyl ester (CA INDEX NAME)

RN 904958-54-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(8-bromooctyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-[(tetrahydro-2H-pyran-2-yl)oxy]ethyl ester (CA INDEX NAME)

RN 904958-55-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(3-bromopropyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-[(tetrahydro-2H-pyran-2-yl)oxy]ethyl ester (CA INDEX NAME)

RN 904958-56-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[1,2-ethanediylbis(4,1-piperazinediyl-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, bis[2-[(tetrahydro-2H-pyran-2-yl)oxy]ethyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-B

- RN 904958-57-2 ZCAPLUS
- CN 5-Pyrimidinecarboxylic acid, 1,1'-[(ethylimino)di-8,1-octanediyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-

(trifluoromethyl)phenyl]-, bis[2-[(tetrahydro-2H-pyran-2-yl)oxy]ethyl]
ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} CH_2 \\ CH$$

RN 904958-58-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-[[4-(methoxycarbonyl)phenyl]methyl]-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-59-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[(4-carboxyphenyl)methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 5-ethyl ester (CA INDEX NAME)

RN 904958-60-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-[[3-(methoxycarbonyl)phenyl]methyl]-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-61-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[(3-carboxyphenyl)methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 5-ethyl ester (CA INDEX NAME)

RN 904958-62-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)propyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-63-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(3-aminopropyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-64-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[5-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)pentyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, <math>(4R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 904958-65-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(5-aminopentyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

RN 904958-66-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[carbonothioylbis(imino-3,1-propanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-67-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,1'-[carbonothioylbis(imino-5,1-pentanediyl)]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

CN 5-Pyrimidinecarboxylic acid, 1,1'-[2,12-dioxo-7-[(trifluoroacetyl)amino]-3,6,8,11-tetraaza-6-tridecene-1,13-diyl]bis[6-(4-cyanophenyl)-1,2,3,6-tetrahydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, diethyl ester, (6R,6'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

RN 904958-69-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

$$_{\mathrm{H_{2}C}}$$

RN 904958-70-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester, (4R)- (CA INDEX NAME)

PAGE 1-B

RN 904958-71-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[2-[[2-[[2-[[2-[[6R)-5-carboxy-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-72-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(5-bromopentyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

RN 904958-75-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-[(4-methyl-1-piperazinyl)carbonyl]-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)-(CA INDEX NAME)

Absolute stereochemistry.

RN 904958-76-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-[[4-[(1,1-dimethylethoxy)carbonyl]-1-piperazinyl]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904958-77-6 ZCAPLUS

CN 1-Piperazinecarboxylic acid, 4-[[(4R)-4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[2-[(6R)-6-(4-cyanophenyl)-5-[[4-[(1,1-dimethylethoxy)carbonyl]-1-piperazinyl]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-5-pyrimidinyl]carbonyl]-,1,1-dimethylethyl ester (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

PAGE 2-B

RN 904958-79-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[[2-(phenylmethoxy)ethoxy]carbonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 904958-80-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-[[2-[[2-[[2-[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[[2-(phenylmethoxy)ethoxy]carbonyl]-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]methylamino]ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-,2-(phenylmethoxy)ethyl ester (CA INDEX NAME)

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[5-[[(1,1-dimethylethoxy)carbonyl]amino]pentyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-83-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[2-[(5-aminopentyl)amino]-2-oxoethyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 904958-82-3 CMF C29 H32 F3 N5 O4

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 904958-97-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-(1,3-dioxolan-2-yl)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-98-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(3-oxopropyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 904958-99-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-(1,3-dioxolan-2-yl)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904959-00-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(3-oxopropyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, <math>(4R)-(CA INDEX NAME)

RN 904959-03-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-(butoxycarbonyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904959-04-2 ZCAPLUS

CN Ethanaminium, 2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[(6R)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

PAGE 1-B

RN 904959-05-3 ZCAPLUS

CN Ethanaminium, 2-[[2-[(6R)-5-carboxy-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-N-[2-[[2-[(6R)-5-carboxy-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]ethyl]-N,N-dimethyl-, iodide (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 2-A

• I -

RN 904959-06-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(6-cyano-3-pyridinyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 904959-08-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(phenylmethoxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 904959-16-6 ZCAPLUS

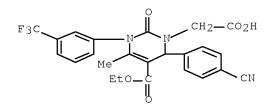
CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(4-penten-1-yl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

IT 671776-27-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of multimers of tetrahydropyrimidinone compds. as elastase inhibitors useful in the treatment of respiratory diseases)

RN 671776-27-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



L6 ANSWER 5 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:979623 ZCAPLUS Full-text

DOCUMENT NUMBER: 143:286441

TITLE: Preparation of diaryl-dihydropyrimidin-2-ones as human

neutrophil elastase inhibitors

INVENTOR(S): Gielen-Haertwig, Heike; Albrecht, Barbara; Keldenich,

Joerg; Li, Volkhart; Pernerstorfer, Josef; Schlemmer,

APPLICATION NO.

DATE

Karl-Heinz; Telan, Leila

PATENT ASSIGNEE(S): Bayer Healthcare A.-G., Germany

SOURCE: PCT Int. Appl., 141 pp.

CODEN: PIXXD2

KIND DATE

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

						_													
WO	2005082864				A1		20050909		WO 2005-EP1486					20050215					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,		
		SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		AZ,	BY,	KG,	KZ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,		
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,		
		MR,	NE,	SN,	TD,	ΤG													
CA	A 2557271				A1 20050909				CA 2005-2557271					20050215					
EP					A1	A1 20061122				EP 2005-707386									
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,		
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR				
JP	· · · ·						2007	0830	JP 2007-500099					•					
US	US 20080064704					1 20080313				US 2007-590770					20070618				
PRIORIT	RIORITY APPLN. INFO.:									EP 2	004-	4314			A 2	0040	226		
									1	WO 2	005-	EP14	86	1	w 2	0050	215		
OTHER S GI	` '					CASREACT 143:286441; MARPAT 143:286441													

AB Title compds. I [A = aryl or heteroaryl ring; R1, R2 and R3 independently = H, halo, nitro, etc.; R4 = (un)substituted alkyl, cycloalkylcarbonyl,

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

alkylcarbonyl, etc.; R5 = (un)substituted alkyl; R6 = H, formyl, aminocarbonyl, etc.; R7 = cyano, OH, nitro, etc.; V, W, X, Y and Z independently = CH or N wherein the ring contains either 0, 1 or 2 nitrogen atoms] and their pharmaceutically acceptable salts, are prepared and disclosed as human neutrophil elastase (HNE) inhibitors. Thus, e.g., II was prepared by cyclization of N-[3-(trifluoromethyl)phenyl]urea and 4-cyanobenzaldehyde with ethyl-3-oxobutanoate and subsequent reduction using LAH. The activity of I against HNE was evaluated in an in vitro enzyme assay utilizing a fluorgenic peptide substrate and it was revealed that selected compds. of the invention possessed IC50 values in the range of 5 up to 1000 nM. I as inhibitors of human neutrophil elastase should prove useful in the treatment of chronic obstructive pulmonary diseases, acute coronary syndrome, acute myocardial infarction and heart failure development. Pharmaceutical compns. comprising I are disclosed.

IT 864251-32-1P 864251-33-2P

RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)

(preparation of diaryl-dihydropyrimidin-2-ones as human neutrophil elastase inhibitors)

RN 864251-32-1 ZCAPLUS

CN Benzonitrile, 4-[5-(cyclohexylcarbonyl)-3-[2-(diethylamino)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-4-pyrimidinyl]-(CA INDEX NAME)

RN 864251-33-2 ZCAPLUS

CN Benzonitrile, 4-[5-(cyclopropylcarbonyl)-3-[2-(diethylamino)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-4-pyrimidinyl]- (CA INDEX NAME)

IT 864251-36-5P 864251-37-6P

RL: PAC (Pharmacological activity); PUR (Purification or recovery); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diaryl-dihydropyrimidin-2-ones as human neutrophil elastase inhibitors)

RN 864251-36-5 ZCAPLUS

CN Benzonitrile, 4-[(4R)-5-(cyclopropylcarbonyl)-3-[2-(diethylamino)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864251-37-6 ZCAPLUS

CN Benzonitrile, 4-[(4S)-5-(cyclohexylcarbonyl)-3-[2-(diethylamino)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

IT 864250-66-8P 864250-67-9P 864250-68-0P 864250-71-5P 864250-72-6P 864250-73-7P 864250-75-9P 864250-78-2P 864250-82-8P

864250-83-9P 864250-86-2P 864250-87-3P 864250-95-3P 864251-05-8P 864251-08-1P 864251-09-2P 864251-10-5P 864251-22-9P 864251-24-1P 864251-27-4P 864251-29-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of diaryl-dihydropyrimidin-2-ones as human neutrophil elastase inhibitors)

RN 864250-66-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclobutylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864250-67-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864250-68-0 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864250-71-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864250-72-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864250-73-7 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-5-(4-methoxybenzoyl)-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864250-75-9 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864250-78-2 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864250-82-8 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864250-83-9 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864250-86-2 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864250-87-3 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864250-95-3 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[[1-[(phenylmethoxy)carbonyl]-2-piperidinyl]carbonyl]-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-05-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3, 6-dihydro-4-methyl-2-oxo-5-[[2-(2-oxo-1-pyrrolidinyl)ethoxy]carbonyl]-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-08-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-[[(methylsulfonyl)amino]carbonyl]-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-09-2 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[[(2,2,2-trifluoroethyl)sulfonyl]amino]carbonyl]-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-10-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-[[[(4-fluorophenyl)sulfonyl]amino]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-22-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-(4-bromobenzoyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-24-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-([1,1'-biphenyl]-4-ylcarbonyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-27-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(4-nitrobenzoyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-29-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl

Absolute stereochemistry.

```
ΙT
     864250-45-3P 864250-69-1P 864250-70-4P
     864250-74-8P 864250-76-0P 864250-79-3P
     864250-80-6P 864250-84-0P 864250-85-1P
     864250-88-4P 864250-89-5P 864250-90-8P
     864250-91-9P 864250-92-0P 864250-93-1P
     864250-96-4P 864251-02-5P 864251-03-6P
     864251-04-7P 864251-06-9P 864251-07-0P
     864251-14-9P 864251-15-0P 864251-16-1P
     864251-17-2P 864251-23-0P 864251-25-2P
     864251-28-5P 864251-30-9P 864251-34-3P
     864251-35-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of diaryl-dihydropyrimidin-2-ones as human neutrophil elastase
        inhibitors)
     864250-45-3 ZCAPLUS
RN
     1(2H) -Pyrimidineacetic acid, 5-[[2-(carboxymethoxy)ethoxy]carbonyl]-6-(4-
CN
     cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-,
     (6R) - (CA INDEX NAME)
```

```
RN 864250-69-1 ZCAPLUS
CN 1(2H)-Pyrimidineacetic acid, 5-[(2-amino-4-methyl-5-thiazolyl)carbonyl]-6-
(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-,
1,1-dimethylethyl ester (CA INDEX NAME)
```

$$F_3C$$
 Me
 CH_2
 $C-OBu-t$

RN 864250-70-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclobutylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864250-74-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-5-(4-methoxybenzoyl)-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864250-76-0 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864250-79-3 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-[[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864250-80-6 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864250-84-0 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-N-[(4-cyanophenyl)sulfonyl]-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864250-85-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-N-[(2,2,2-trifluoroethyl)sulfonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$CH_2$$
 CH_2
 CH_2

RN 864250-88-4 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864250-89-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-N-[(4-cyanophenyl)sulfonyl]-5-

(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864250-90-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-N-[(2,2,2-trifluoroethyl)sulfonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$CH_2$$
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2

RN 864250-91-9 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864250-92-0 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864250-93-1 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-5-(cyclohexylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864250-96-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[[1-[(phenylmethoxy)carbonyl]-2-piperidinyl]carbonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[[2-(phenylmethoxy)-1-[(phenylmethoxy)methyl]ethoxy]carbonyl]-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-03-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3, 6-dihydro-4-methyl-5- [[(1S)-1-methyl-2-oxo-2-(phenylmethoxy)ethoxy]carbonyl]-2-oxo-3-[3- (trifluoromethyl)phenyl]-, 1, 1-dimethylethyl ester, (6R)-rel- (CA INDEX NAME)

Relative stereochemistry.

RN 864251-04-7 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]ethoxy]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-06-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanopheny1)-3, 6-dihydro-4-methy1-2-oxo-5-[[2-oxo-2-(phenylmethoxy)ethoxy]carbony1]-3-[3-(trifluoromethy1)pheny1]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-07-0 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3, 6-dihydro-4-methyl-2-oxo-5-[[2-(2-oxo-1-pyrrolidinyl)ethoxy]carbonyl]-3-[3-(trifluoromethyl)phenyl]-(CA INDEX NAME)

RN 864251-14-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-[[(methylsulfonyl)amino]carbonyl]-2-oxo-3-[3-(trifluoromethyl)phenyl]-(CA INDEX NAME)

RN 864251-15-0 ZCAPLUS

CN 1(2H) -Pyrimidineacetic acid, 6-(4-cyanophenyl)-3, 6-dihydro-4-methyl-2-oxo-1

5-[[[(2,2,2-trifluoroethyl)sulfonyl]amino]carbonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864251-16-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-[[[(4-fluorophenyl)sulfonyl]amino]carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864251-17-2 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-5-(hydroxymethyl)-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-23-0 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-(4-bromobenzoyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864251-25-2 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-([1,1'-biphenyl]-4-ylcarbonyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-(CA INDEX NAME)

RN 864251-28-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-(4-aminobenzoyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

864251-30-9 ZCAPLUS

RN

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(cyclopropylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX

NAME)

Absolute stereochemistry.

RN 864251-34-3 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-[(2,2-dimethyl-1,3-dioxolan-4-yl)carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-35-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-[(2,2-dimethyl-1,3-dioxolan-4-yl)carbonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, methyl ester (CA INDEX NAME)

IT 864151-39-3P 864251-40-1P 864251-41-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of diaryl-dihydropyrimidin-2-ones as human neutrophil elastase

inhibitors)

RN 864151-39-3 ZCAPLUS

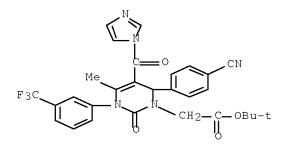
CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864251-40-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-carboxy-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1-(1,1-dimethylethyl) ester (CA INDEX NAME)

RN 864251-41-2 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-5-(1H-imidazol-1-ylcarbonyl)-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:979622 ZCAPLUS Full-text

DOCUMENT NUMBER: 143:286440

TITLE: Preparation of tetrasubstituted pyrimidin-2-ones as

human neutrophil elastase inhibitors

INVENTOR(S): Gielen-Haertwig, Heike; Albrecht, Barbara; Keldenich,

Joerg; Li, Volkhart; Pernerstorfer, Josef; Schlemmer,

Karl-Heinz; Telan, Leila

PATENT ASSIGNEE(S): Bayer Healthcare A.-G., Germany

SOURCE: PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					D	DATE		APPLICATION NO.					DATE					
	2005082863 2005082863								WO 2005-EP1487					20050215					
	W:							AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		•	•	•	•	•	•	DK,	•	•	•	•	•	•	•	•	•		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,		
		SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,		
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	$\mathrm{ML}_{m{\prime}}$		
		MR,	ΝE,	SN,	TD,	ΤG													
CA	CA 2557272				A1 20050909				CA 2005-2557272					20050215					
EP					A2				EP 2005-707387										
	R:	•			•			DE,					•			HU,	IE,		
		•			•			NL,					•						
	JP 2007523931																		
	US 20080021053				A1 20080124														
PRIORIT	PRIORITY APPLN. INFO.:									EP 2004-4315									
										WO 2	005-	EP14	87	,	W 2	0050	215		
OTHER S	THER SOURCE(S):						MARPAT 143:286440												

GΙ

AB Title compds. I [A = heteroaryl ring; R1-3 = H, halo, NO2, etc.; R4 = CF3CO, alkylcarbonyl, etc.; R5 = alkyl, alkoxy, etc.; R6 = T-U; T = alkanediyl, akenediyl; U = aryl, heteroaryl, etc.; R7 = halo, NO2, CN, etc.; Y1-5 = independently CH, N wherein the ring contains 0-2 N atoms] and analogs are prepared For instance, II is prepared in 6 steps from 2-bromo-5-

methylpyridine, allyl 3-oxobutanoate and N-[3- (trifluoromethyl)phenyl]urea. II has an IC50 = 70 nM for human neutrophil elastase (HNE). I are useful for the treatment of chronic obstructive pulmonary diseases, acute coronary syndrome, acute myocardial infarction and heart failure development.

IT 864150-42-5P 864150-44-7P 864150-46-9P 864150-48-1P 864150-50-5P 864150-52-7P 864150-53-8P 864150-54-9P 864150-55-0P 864150-56-1P 864150-57-2P 864150-58-3P 864150-62-9P 864150-63-0P 864150-61-8P 864150-81-2P 864150-82-3P 864150-83-4P 864150-85-7P 864150-89-0P 864151-03-1P 864151-05-3P 864151-05-3P 864151-05-3P 864151-05-3P 864151-29-1P 864151-50-8P 864151-51-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of tetrasubstituted pyrimdin-2-ones as human neutrophil elastase inhibitors) $\label{eq:preparation}$

RN 864150-42-5 ZCAPLUS

CN Benzoic acid, 3-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864150-44-7 ZCAPLUS

CN Benzoic acid, 3-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-46-9 ZCAPLUS

CN Benzeneacetic acid, $4-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-<math>\alpha$ -cyclopentyl-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864150-48-1 ZCAPLUS

CN Benzoic acid, 4-[[2-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]methylamino]-, methyl ester (CA INDEX NAME)

RN 864150-50-5 ZCAPLUS

CN Benzoic acid, 4-[[2-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]-, methyl ester (CA INDEX NAME)

RN 864150-52-7 ZCAPLUS

CN Benzoic acid, 4-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864150-53-8 ZCAPLUS

CN Benzoic acid, 4-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-,
1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-54-9 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864150-55-0 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-56-1 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864150-57-2 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-58-3 ZCAPLUS

CN Benzoic acid, 3-[[5-acetyl-6-(6-cyano-3-pyridinyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-,
1,1-dimethylethyl ester (CA INDEX NAME)

RN 864150-59-4 ZCAPLUS

CN Benzeneacetic acid, $4-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-<math>\alpha$ -(2-methylpropyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864150-60-7 ZCAPLUS

CN Cyclopropanecarboxylic acid, 1-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]-, ethyl ester (CA INDEX NAME)

RN 864150-61-8 ZCAPLUS

CN 2-Propenoic acid, 3-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$F_3C$$
 CH CH CH CDH CDH CDH CDH CDH

RN 864150-62-9 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[5-cyano-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864150-63-0 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[5-cyano-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} F3C \\ \\ MeO \\ \hline \\ CN \\ \end{array}$$

RN 864150-64-1 ZCAPLUS

CN Benzoic acid, 4-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

$$Ac$$
 N
 CH_2
 CO_2H
 F_3C

RN 864150-81-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[(3-bromophenyl)methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 864150-82-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[(4-bromophenyl)methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} CN \\ Eto-C \\ Me \\ N \\ CH_2 \\ \end{array}$$

RN 864150-83-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[[3-[(1E)-3-ethoxy-3-oxo-1-propen-1-yl]phenyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

Double bond geometry as shown.

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[[4-[(1E)-3-ethoxy-3-oxo-1-propen-1-yl]phenyl]methyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

Double bond geometry as shown.

RN 864150-89-0 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864150-93-6 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864150-95-8 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864150-97-0 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864151-03-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, $4-(4-\text{cyanophenyl})-1,2,3,4-\text{tetrahydro-}6-\text{methyl-}2-\text{oxo-}3-[(\text{phenylmethoxy})\,\text{methyl}]-1-[3-(\text{trifluoromethyl})\,\text{phenyl}]-,$ 2-propen-1-yl ester, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 864151-05-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[[4-[(1,1-dimethylethoxy)carbonyl]phenyl]methyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 864151-06-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[[3-[(1,1-dimethylethoxy)carbonyl]phenyl]methyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

$$H_2C$$
 CH CH_2 O CH_2 C C OBu C

RN 864151-07-5 ZCAPLUS

CN 5(2H)-Pyrimidinecarboxylic acid, 6-(4-cyanophenyl)-1-[1-(ethoxycarbonyl)cyclopropyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 864151-12-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-[2-oxo-2-[[(2,2,2-trifluoroethyl)sulfonyl]amino]ethyl]-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

F3C
$$CH_2$$
 CH_2 $CH_$

RN 864151-29-1 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(2-methyl-1-oxopropyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

$$\begin{array}{c} \text{F3C} \\ \text{MeO-C} \\ \text{C} \\ \text{N} \\ \text{C} \\ \text{Pr-i} \\ \text{C} \\$$

RN 864151-50-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864151-51-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

```
ΙT
     864150-65-2P 864150-66-3P 864150-67-4P
     864150-68-5P 864150-69-6P 864150-70-9P
     864150-71-0P 864150-72-1P 864150-73-2P
     864150-74-3P 864150-75-4P 864150-76-5P
     864150-77-6P 864150-78-7P 864150-79-8P
     864150-80-1P 864150-84-5P 864150-85-6P
     864150-87-8P 864150-88-9P 864150-90-3P
     864150-91-4P 864150-92-5P 864150-94-7P
     864150-96-9P 864150-98-1P 864150-99-2P
     864151-00-8P 864151-01-9P 864151-02-0P
     864151-04-2P 864151-08-6P 864151-09-7P
     864151-10-0P 864151-11-1P 864151-13-3P
     864151-14-4P 864151-15-5P 864151-16-6P
     864151-17-7P 864151-18-8P 864151-19-9P
     864151-20-2P 864151-21-3P 864151-22-4P
     864151-23-5P 864151-24-6P 864151-25-7P
     864151-26-8P 864151-27-9P 864151-28-0P
     864151-30-4P 864151-31-5P 864151-49-5P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of tetrasubstituted pyrimdin-2-ones as human neutrophil
        elastase inhibitors)
RN
     864150-65-2 ZCAPLUS
     Benzeneacetic acid, 4-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-
CN
```

oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- α -(2-methylpropyl)- (CA INDEX NAME)

RN 864150-66-3 ZCAPLUS

CN Benzeneacetic acid, 4-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- α -cyclopentyl- (CA INDEX NAME)

RN 864150-67-4 ZCAPLUS

CN Benzoic acid, 3-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-68-5 ZCAPLUS

CN Benzoic acid, 4-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-69-6 ZCAPLUS

CN Benzoic acid, 3-[[5-acetyl-6-(6-cyano-3-pyridinyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864150-70-9 ZCAPLUS

CN 2-Propenoic acid, 3-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]- (CA INDEX NAME)

RN 864150-71-0 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864150-72-1 ZCAPLUS

CN Benzoic acid, 3-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864150-73-2 ZCAPLUS

CN Benzoic acid, 4-[[2-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]methylamino]- (CA INDEX NAME)

RN 864150-74-3 ZCAPLUS

CN Benzoic acid, 4-[[2-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]acetyl]amino]- (CA INDEX NAME)

RN 864150-75-4 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{F3C} \\ \text{O} \\ \text{N} \\ \text{CH}_2 \\ \text{N} \\ \text{Ac} \\ \end{array}$$

RN 864150-76-5 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-77-6 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[(6R)-5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-78-7 ZCAPLUS

CN Cyclopropanecarboxylic acid, 1-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]- (CA INDEX NAME)

RN 864150-79-8 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[(6R)-5-cyano-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-80-1 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[(6R)-5-cyano-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 864150-84-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-[[3-(2-thienyl)phenyl]methyl]-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 864150-85-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[[3-[(1E)-2-carboxyethenyl]phenyl]methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

Double bond geometry as shown.

RN 864150-87-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[[4-[(1E)-2-carboxyethenyl]phenyl]methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

Double bond geometry as shown.

$$HO_2C$$
 Me
 N
 O
 E
 CO_2H
 F_3C

RN 864150-88-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[[4-[(1E)-2-carboxyethenyl]phenyl]methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-,5-ethyl ester (CA INDEX NAME)

Double bond geometry as shown.

RN 864150-90-3 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864150-91-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-N-[(4-cyanophenyl) sulfonyl]-5-(2-furanylcarbonyl)-3, <math>6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl) phenyl]-(CA INDEX NAME)

RN 864150-92-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-N-[(2,2,2-trifluoroethyl)sulfonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864150-94-7 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864150-96-9 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]-, methyl ester (CA INDEX NAME)

RN 864150-98-1 ZCAPLUS

CN 2-Furancarboxylic acid, 5-[[6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864150-99-2 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864151-00-8 ZCAPLUS

CN Benzoic acid, 3-[[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 864151-01-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-N-[(2,2,2-trifluoroethyl)sulfonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864151-02-0 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-N-[(4-cyanophenyl)sulfonyl]-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864151-04-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-[(phenylmethoxy)methyl]-1-[3-(trifluoromethyl)phenyl]-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

$$F_3C$$

$$Me$$

$$CO_2H$$

$$CN$$

RN 864151-08-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[(3-carboxyphenyl)methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-,

5-(2-propen-1-yl) ester (CA INDEX NAME)

$$H_2C$$
 CH CH_2 CH_2 CH_2 CO_2H

RN 864151-09-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[(4-carboxyphenyl)methyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-,5-(2-propen-1-yl) ester (CA INDEX NAME)

$$H_2C$$
 CH CH_2 CH_2 CO_2H CO_2H CH_2 CH_2 CO_2H

RN 864151-10-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(1-carboxycyclopropyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 5-ethyl ester (9CI) (CA INDEX NAME)

CN 5(2H)-Pyrimidinecarboxylic acid, 1-(1-carboxycyclopropyl)-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-(CA INDEX NAME)

RN 864151-13-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-[2-oxo-2-[[[4-(trifluoromethyl)phenyl]sulfonyl]amino]ethyl]-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 864151-14-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[2-[[(4-nitrophenyl)sulfonyl]amino]-2-oxoethyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

$$H_2C$$
 $=$ CH_2 $=$ $=$ CH_2 $=$ $=$ CH_2 $=$ C

RN 864151-15-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[(4-cyanophenyl)sulfonyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 864151-16-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-[2-(hydroxyamino)-2-oxoethyl]-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

RN 864151-17-7 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-N-[(2,2,2-trifluoroethyl)sulfonyl]-3-[3-(trifluoromethyl)phenyl]-(CA INDEX NAME)

$$F_3C$$
 Me
 CH_2
 CH

RN 864151-18-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 5-acetyl-6-(4-cyanophenyl)-N-[(4-cyanophenyl)sulfonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c} CN \\ AC \\ N \\ CH_2 \\ \hline \end{array} \quad \begin{array}{c} CN \\ NH \\ \hline \end{array} \quad \begin{array}{c} CN \\ CN \\ \hline \end{array}$$

RN 864151-19-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-N-[(2,2,2-trifluoroethyl)sulfonyl]-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 864151-20-2 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 5-acetyl-6-(4-cyanophenyl)-N-[(4-cyanophenyl)sulfonyl]-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 864151-21-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-

 $2-\infty -3-[2-\infty -2-[[(2,2,2-trifluoroethyl)sulfonyl]amino]ethyl]-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)$

RN 864151-22-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-[2-oxo-2-[[(2,2,2-trifluoroethyl)sulfonyl]amino]ethyl]-1-[3-(trifluoromethyl)phenyl]-, 2-hydroxyethyl ester (CA INDEX NAME)

RN 864151-23-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-[(4-carboxyphenyl)sulfonyl]-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 5-(2-propen-1-yl) ester (CA INDEX NAME)

RN 864151-24-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[(1,1-dimethylethoxy)carbonyl]amino]acetyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-propen-1-yl ester (CA INDEX NAME)

$$F_{3}C$$

$$Me$$

$$C - CH_{2} - NH - C - OBu - t$$

$$CN$$

$$CN$$

$$CH_{2} - CH_{2} - CH_{2}$$

RN 864151-25-7 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1-[2-oxo-2-(phenylmethoxy)ethyl] 5-(2-propen-1-yl) ester (CA INDEX NAME)

RN 864151-26-8 ZCAPLUS

CN 1(2H)-Pyrimidinecarboxylic acid, 5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 2-oxo-2-(phenylmethoxy)ethyl ester (CA INDEX NAME)

RN 864151-27-9 ZCAPLUS

CN Benzonitrile, 4-[5-acetyl-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(2-propen-1-yl)-1-[3-(trifluoromethyl)phenyl]-4-pyrimidinyl]- (CA INDEX NAME)

RN 864151-28-0 ZCAPLUS

CN Carbamic acid, [2-[5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 864151-30-4 ZCAPLUS

CN 1(2H)-Pyrimidineacetamide, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(2-methyl-1-oxopropyl)-2-oxo-N-[(2,2,2-trifluoroethyl)sulfonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864151-31-5 ZCAPLUS

CN 4-Oxazolecarboxylic acid, 2-[[6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(2-methyl-1-oxopropyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-1(2H)-pyrimidinyl]methyl]- (CA INDEX NAME)

HO2C
$$\sim$$
 CH2 \sim N \sim CH2 \sim

RN 864151-49-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

IT 864151-38-2P 864151-39-3P 864151-40-6P

864151-41-7P 864151-42-8P 864151-43-9P

864151-44-0P 864151-45-1P 864151-46-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of tetrasubstituted pyrimdin-2-ones as human neutrophil elastase inhibitors)

RN 864151-38-2 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, methyl ester (CA INDEX NAME)

RN 864151-39-3 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

F3C
$$\sim$$
 CH2—COBu-t \sim CN \sim CH2—CH2

RN 864151-40-6 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 864151-41-7 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-[(2-propen-1-yloxy)carbonyl]-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

F3C
$$\sim$$
 CH2-CO2H \sim R \sim CH2-CH2-CH2-CH2

RN 864151-42-8 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 5-acetyl-6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, (6R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 864151-43-9 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(2-furanylcarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864151-44-0 ZCAPLUS

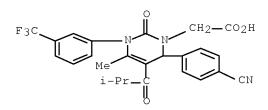
CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-5-(3-pyridinylcarbonyl)-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864151-45-1 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(2-methyl-1-oxopropyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 864151-46-2 ZCAPLUS

1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-5-(2-mCN methyl-1-oxopropyl)-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



ANSWER 7 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN L6 ACCESSION NUMBER: 2004:253147 ZCAPLUS Full-text

DOCUMENT NUMBER: 140:287406

Preparation of pyrimidinones as human neutrophil TITLE:

elastase (HNE) inhibitors

INVENTOR(S): Gielen, Heike; Li, Volkhart; Rosentreter, Ulrich;

Schlemmer, Karl-heinz; Allerheiligen, Swen; Telan, Leila; Baerfacker, Lars; Keldenich, Joerg; Fitzgerald,

Mary F.; Nash, Kevin; Albrecht, Barbara; Meurer, Dirk

PATENT ASSIGNEE(S): Bayer Healthcare Ag, Germany

SOURCE: PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE				
WO 2004024700	A1 20040325	WO 2003-EP9525	20030828				
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ	C, CA, CH, CN,				
CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI, GE	B, GD, GE, GH,				
GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KP, KR, KZ	Z, LC, LK, LR,				
LS, LT, LU,	LV, MA, MD, MG,	MK, MN, MW, MX, MZ, NI	, NO, NZ, OM,				
PG, PH, PL,	PT, RO, RU, SC,	SD, SE, SG, SK, SL, SY	, TJ, TM, TN,				
TR, TT, TZ,	UA, UG, US, UZ,	VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZM, ZW	, AM, AZ, BY,				
KG, KZ, MD,	RU, TJ, TM, AT,	BE, BG, CH, CY, CZ, DE	C, DK, EE, ES,				
FI, FR, GB,	GR, HU, IE, IT,	LU, MC, NL, PT, RO, SE	E, SI, SK, TR,				
BF, BJ, CF,	CG, CI, CM, GA,	GN, GQ, GW, ML, MR, NE	C, SN, TD, TG				
GB 2392910	A 20040317	GB 2003-15870	20030707				
CA 2498051	A1 20040325	CA 2003-2498051	20030828				

	2003282006 1546113				A1 20040430 A1 20050629						2003- 2003-		20030828 20030828				
ш			BE,	CH,	DE,			FR,	GB,				LU,	NL,	SE,		PT,
	-	ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	ΑI	J, TR,	ВG,	CZ,	EE,	HU,	SK	
BR	200303	Α	A 20050809 BR 2003-14186									20030828					
JP	200650	T	T 20060302 JP 2004-571738								20030828						
NZ	Z 538670 X 2005PA02644				Α	A 20070126 NZ					2003-	20030828					
MX					Α	A 20050920 MX 2005-PA2644							20050309				
NO 2005001726				A 20050407				NO 2005-1726						2005040			
US	200603	1608	01		A1	2	2006	0720	1	US	2005-	-5273	91		2	0051	021
PRIORIT	Y APPLI	N. I	NFO	. :					(GB	2002-	-2096	2		A 2	0020	910
									(GB	2002-	-2660	9		A 2	0021	114
									(GB	2003-	-1587	0		A 2	0030	707
									Ī	WO	2003-	-EP95	25	1	W 2	0030	828

OTHER SOURCE(S): MARPAT 140:287406

Ι

Title compds. I [wherein A = hetero/aryl; R1, R2, R3 = independently H, halo, AΒ NO2, CN, OH and derivs., (un) substituted alkyl, R4 = CN, trifluoromethylcarbonyl, alkenoxycarbonyl, hydroxycarbonyl, aryl/alkylaminocarbonyl, (un)substituted heteroarylcarbonyl, heterocyclylcarbonyl, heteroaryl, heterocyclyl, alkylcarbonyl, alkoxycarbonyl, mono- and dialkylaminocarbonyl; R5 = NH2, (un)substituted alkyl; R6 = H, formyl, N-(alkylsulfonyl)/N-(alkylsulfonyl)-N- (alkyl)/aminocarbonyl, heteroarylcarbonyl, heterocyclylcarbonyl, cycloalkylcarbonyl, (un)substituted alkyl, mono- and dialkylaminocarbonyl, alkylcarbonyl, alkoxycarbonyl, heteroaryl, heterocyclyl, etc.; R7 = halo, NO2, CN, OH, (un)substituted alkyl, alkoxy; Y1, Y2, Y3, Y4, Y5 = independently CH or N; and their salts, hydrates, and/or solvates, and their tautomeric forms] were prepared as human neutrophil elastase (HNE) inhibitors. For example, II was prepared, in 91% yield, by cyclocondensation of N-[3-(trifluoromethyl)phenyl]urea with 4cyanobenzaldehyde and Et 3-oxobutanoate. In an in vitro assay, II displayed an IC50 value of 8 nM for HNE inhibition. Thus, I are useful for treatment of acute and chronic inflammation, ischemic and remodelling processes, in particular chronic obstructive pulmonary diseases.

IT 671775-98-7P, Ethyl 4-(4-cyanophenyl)-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-1,2,3,4-tetrahydro-5-pyrimidinecarboxylate 671776-27-5P 671776-58-2P, 4-(4-Cyanophenyl)-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-1,2,3,4-tetrahydro-5-pyrimidinecarboxylic acid RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(human neutrophil elastase inhibitor; preparation of pyrimidinones as human neutrophil elastase inhibitors)

RN 671775-98-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-27-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 671776-58-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

IT 671775-94-3P, Ethyl 4-(4-cyanophenyl)-3-formyl-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-1,2,3,4-tetrahydro-5-pyrimidinecarboxylate 671775-99-8P, Ethyl 3-acetyl-4-(4-cyanophenyl)-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-1,2,3,4-tetrahydro-5-pyrimidinecarboxylate 671776-00-4P, Diethyl 6-(4-cyanophenyl)-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-3,6-dihydro-1,5(2H)-pyrimidinedicarboxylate 671776-14-0P 671776-15-1P 671776-16-2P 671776-17-3P 671776-18-4P 671776-19-5P 671776-20-8P 671776-21-9P 671776-22-0P 671776-23-1P 671776-24-2P 671776-25-3P 671776-33-1P 671776-31-1P 671776-32-2P 671776-33-3P 671776-31-1P 671776-35-5P

671776-36-6P 671776-42-4P, Ethyl 4-(4-cyanophenyl)-6methyl-3-[2-(4-morpholinyl)-2-oxoethyl]-2-oxo-1-[3(trifluoromethyl)phenyl]-1,2,3,4-tetrahydro-5-pyrimidinecarboxylate
671776-43-5P 671776-44-6P 671776-45-7P
671776-69-5P 671776-70-8P 671776-71-9P
671776-72-0P 671776-73-1P 671776-74-2P
671776-75-3P 671776-76-4P 671776-80-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(human neutrophil elastase inhibitor; preparation of pyrimidinones as human neutrophil elastase inhibitors)

RN 671775-94-3 ZCAPLUS

671776-81-1P 675103-27-2P

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-formyl-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671775-99-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-acetyl-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-00-4 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 6-(4-cyanophenyl)-3, 6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,5-diethyl ester (CA INDEX NAME)

RN 671776-14-0 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-15-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-(cyclopropylcarbonyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-16-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-ethyl-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-17-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-(4-morpholinylcarbonyl)-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-18-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[(dimethylamino)carbonyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-19-5 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 5-ethyl 1-methyl ester (CA INDEX NAME)

RN 671776-20-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(phenylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-21-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(1-oxopropyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-22-0 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 5-ethyl 1-(2-methoxyethyl)ester (CA INDEX NAME)

RN 671776-23-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-(2-methyl-1-oxopropyl)-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-24-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[(diethylamino)carbonyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-25-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[[methyl(methylsulfonyl)amino]carbonyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-26-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(2-amino-2-oxoethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-28-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(2-aminoethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-29-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(2-pyridinylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-30-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-(diethylamino)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-31-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[2-(methylamino)-2-oxoethyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-32-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(3-pyridinylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-33-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(4-pyridinylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-34-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-(1H-imidazol-2-ylmethyl)-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-35-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(cyanomethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

$$\mathbb{R}^{\mathbb{C}\mathbb{N}}$$

RN 671776-36-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-[2-[(2-methoxyethyl)amino]-2-oxoethyl]-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-42-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[2-(4-morpholinyl)-2-oxoethyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-43-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[2-(4-methyl-1-piperazinyl)-2-oxoethyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-44-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-(dimethylamino)ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-45-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-(dimethylamino)-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-69-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(3-pyridinyl)ethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & \text{CN} \\ & & & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{O} \\ & & & \text{Me} \end{array}$$

RN 671776-70-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 3-pyridinylmethyl ester (CA INDEX NAME)

$$CH_2$$
 CH_2 O Me Me O

RN 671776-71-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-amino-2-oxoethyl ester (CA INDEX NAME)

RN 671776-72-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(formylmethylamino)ethyl ester (CA INDEX NAME)

RN 671776-73-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(acetylamino)ethyl ester (CA INDEX NAME)

RN 671776-74-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, (1-methyl-1H-imidazol-5-yl)methyl ester (CA INDEX NAME)

RN 671776-75-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(1H-pyrazol-1-yl)ethyl ester (CA INDEX NAME)

RN 671776-76-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(1H-1,2,4-triazol-1-yl)ethyl ester (CA INDEX NAME)

$$N$$
 N
 CH_2
 CH_2
 CH_2
 O
 M
 M
 O
 M
 O

RN 671776-77-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-ethoxy-2-oxoethyl ester (CA INDEX NAME)

RN 671776-78-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(dimethylamino)-2-methylpropyl ester (CA INDEX NAME)

RN 671776-79-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 3-(dimethylamino)propyl ester (CA INDEX NAME)

RN 671776-80-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(1-pyrrolidinyl)ethyl ester (CA INDEX NAME)

RN 671776-81-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-pyridinylmethyl ester (CA INDEX NAME)

RN 675103-27-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester, (-)- (CA INDEX NAME)

Rotation (-).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:213317 ZCAPLUS Full-text

DOCUMENT NUMBER: 140:253573

TITLE: Preparation of 2-oxopyrimidines as human leukocyte

elastase (HNE) inhibitors

INVENTOR(S): Gielen, Heike; Li, Volkhart Min-jian; Rosentreter,

Ulrich; Schlemmer, Karl-heinz; Allerheiligen, Swen; Telan, Leila; Baerfacker, Lars; Keldenich, Joerg; Albrecht, Barbara; Meurer, Dirk; Fitzgerald, Mary;

Nash, Kevin

PATENT ASSIGNEE(S): Bayer Ag, Germany

SOURCE: Brit. UK Pat. Appl., 117 pp.

CODEN: BAXXDU

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.				KINI)	DATE APPLICATION NO.							DATE				
					_			-									
	GB 2392910			Α		2004	0317		GB 2	2003-	15870	0		20	030	707	
	CA 2498051	:A 2498051 A1				20040325			CA 2003-2498051						20030828		
	WO 2004024700			A1		2004	0325	V	VO 2	2003-1	EP952	25		20	0308	828	
	W: AF	. AG.	AT.	AM.	AT.	AU.	A7.	BA.	BB.	BG.	BR.	BY.	B7.	CA.	CH.	CN.	

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
         TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003282006
                                20040430
                                          AU 2003-282006
                          Α1
                                                                    20030828
     EP 1546113
                                20050629
                                           EP 2003-773613
                          Α1
                                                                    20030828
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
                                                                    20030828
     BR 2003014186
                          Α
                                20050809
                                            BR 2003-14186
     CN 1732159
                                20060208
                                            CN 2003-824983
                          Α
                                                                    20030828
     JP 2006507355
                          Τ
                                20060302
                                            JP 2004-571738
                                                                    20030828
     NZ 538670
                          Α
                                20070126
                                            NZ 2003-538670
                                                                    20030828
     ZA 2005001964
                                            ZA 2005-1964
                                                                    20050308
                          Α
                                20060531
                                            MX 2005-PA2644
     MX 2005PA02644
                          Α
                                20050920
                                                                    20050309
                         A
A
A1
     NO 2005001726
                                20050407
                                            NO 2005-1726
                                                                    20050407
     US 20060160801
                                20060720
                                            US 2005-527391
                                                                    20051021
                                                                A 20020910
PRIORITY APPLN. INFO.:
                                            GB 2002-20962
                                            GB 2002-26609
                                                                A 20021114
                                            GB 2003-15870
                                                                A 20030707
                                            WO 2003-EP9525 W 20030828
```

OTHER SOURCE(S): MARPAT 140:253573

Title compds. [I; A = aryl, heteroaryl; R1-R3 = H, OH, halo, NO2, cyano, (substituted) alkyl, alkoxy; R4 = F3CCO, (substituted) alkylcarbonyl, alkoxycarbonyl, alkenyloxycarbonyl, CO2H, arylcarbonyl, heteroaryl, heterocyclyl, cyano, etc.; R5 = (substituted) alkyl, amino; R6 = H, CHO, CONH2, (substituted) alkyl, alkoxycarbonyl, alkylsulfonylaminocarbonyl, heteroaryl, heterocyclyl, etc.; R7 = halo, NO2, cyano, OH, (substituted) alkyl, alkoxy; Y1-Y5 = CH, N, wherein the ring contains 0-2 N], were prepared Thus, 3-trifluoromethylphenylurea, 4-cyanobenzaldehyde, Et 3-oxobutyrate, and polyphosphoric acid Et ester were refluxed 18 h in THF to give 91% Et 4-(4-cyanophenyl)-6-methyl-2-oxo-1-[3- (trifluoromethyl)phenyl]-1,2,3,4-tetrahydro-5-pyrimidinecarboxylate. The latter inhibited HNE with IC50 = 8 nM.

IT 671775-94-3P 671775-98-7P 671775-99-8P 671776-00-4P 671776-06-0P 671776-14-0P 671776-15-1P 671776-16-2P 671776-17-3P 671776-18-4P 671776-19-5P 671776-20-8P 671776-21-9P 671776-22-0P 671776-23-1P 671776-24-2P 671776-25-3P 671776-26-4P 671776-27-5P 671776-28-6P 671776-29-7P

671776-30-0P 671776-31-1P 671776-32-2P 671776-33-3P 671776-34-4P 671776-35-5P 671776-36-6P 671776-42-4P 671776-43-5P 671776-44-6P 671776-45-7P 671776-58-2P 671776-69-5P 671776-70-8P 671776-71-9P 671776-72-0P 671776-73-1P 671776-77-5P 671776-78-6P 671776-79-7P 671776-81-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-oxopyrimidines as human leukocyte elastase inhibitors) 671775-94-3 ZCAPLUS

5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-formyl-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671775-98-7 ZCAPLUS

RN

CN

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671775-99-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-acetyl-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-00-4 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 1,5-diethyl ester (CA INDEX NAME)

RN 671776-06-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-chlorophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-14-0 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-15-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-(cyclopropylcarbonyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-16-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-ethyl-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-17-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-(4-morpholinylcarbonyl)-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[(dimethylamino)carbonyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-19-5 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 5-ethyl 1-methyl ester (CA INDEX NAME)

RN 671776-20-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(phenylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-21-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(1-oxopropyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-22-0 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 6-(4-cyanophenyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]-, 5-ethyl 1-(2-methoxyethyl)ester (CA INDEX NAME)

RN 671776-23-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-(2-methyl-1-oxopropyl)-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-24-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[(diethylamino)carbonyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-25-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[[methyl(methylsulfonyl)amino]carbonyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 671776-26-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(2-amino-2-oxoethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-27-5 ZCAPLUS

CN 1(2H)-Pyrimidineacetic acid, 6-(4-cyanophenyl)-5-(ethoxycarbonyl)-3,6-dihydro-4-methyl-2-oxo-3-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 671776-28-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(2-aminoethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-29-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(2-pyridinylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-30-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-(diethylamino)ethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-31-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[2-(methylamino)-2-oxoethyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-32-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(3-pyridinylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-33-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-3-(4-pyridinylmethyl)-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-34-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-(1H-imidazol-2-ylmethyl)-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-35-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-(cyanomethyl)-4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-36-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3-[2-[(2-methoxyethyl)amino]-2-oxoethyl]-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-42-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[2-(4-morpholinyl)-2-oxoethyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-43-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-6-methyl-3-[2-(4-methyl-1-piperazinyl)-2-oxoethyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-44-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-[[2-(dimethylamino)ethyl]amino]-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-45-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-3-[2-(dimethylamino)-2-oxoethyl]-1,2,3,4-tetrahydro-6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, ethyl ester (CA INDEX NAME)

RN 671776-58-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 671776-69-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(3-pyridinyl)ethyl ester (CA INDEX NAME)

RN 671776-70-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 3-pyridinylmethyl ester (CA INDEX NAME)

RN 671776-71-9 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-amino-2-oxoethyl ester (CA INDEX NAME)

RN 671776-72-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(formylmethylamino)ethyl ester (CA INDEX NAME)

RN 671776-73-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(acetylamino)ethyl ester (CA INDEX NAME)

RN 671776-74-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, (1-methyl-1H-imidazol-5-yl)methyl ester (CA INDEX NAME)

RN 671776-75-3 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(1H-pyrazol-1-yl)ethyl ester (CA INDEX NAME)

$$N$$
 N CH_2 CH_2 O Me N O Me

RN 671776-76-4 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(1H-1,2,4-triazol-1-yl)ethyl ester (CA INDEX NAME)

$$N$$
 N
 CH_2
 CH_2
 CH_2
 O
 M
 M
 O
 M
 O

RN 671776-77-5 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-ethoxy-2-oxoethyl ester (CA INDEX NAME)

RN 671776-78-6 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(dimethylamino)-2-methylpropyl ester (CA INDEX NAME)

RN 671776-79-7 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 3-(dimethylamino)propyl ester (CA INDEX NAME)

RN 671776-80-0 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-(1-pyrrolidinyl)ethyl ester (CA INDEX NAME)

RN 671776-81-1 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 4-(4-cyanophenyl)-1,2,3,4-tetrahydro-3,6-dimethyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-, 2-pyridinylmethyl ester (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:779582 ZCAPLUS Full-text

DOCUMENT NUMBER: 136:183781

TITLE: Investigation of the chemical reactivity of positions

 $\mbox{N-3, C-5}$ and C6-methyl group in Biginelli type compounds and synthesis of new dihydropyrimidine

derivatives

AUTHOR(S): Namazi, H.; Mirzaei, Y. R.; Azamat, H.

CORPORATE SOURCE: Lab of Carbohydrates and Biopolymers, Faculty of

Chemistry, University of Tabriz, Tabriz, Iran

SOURCE: Journal of Heterocyclic Chemistry (2001), 38(5),

1051-1054

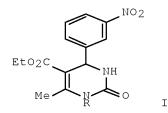
CODEN: JHTCAD; ISSN: 0022-152X

PUBLISHER: HeteroCorporation

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 136:183781

GΙ



AB Biginelli-type compds. (I; R = Me, Ph) were prepared and converted to eight N-3 substituted dihydropyrimidines using NaH and various electrophiles (ClCO2Et, TsCl, Ac2O, AcCl and PhCOCl). I (R = Ph) was monobrominated at the C6-Me group using bromine solution Reaction of the bromo derivative with amino nucleophiles, such as MeNH2 and cyclohexylamine, produced two pyrrolopyrimidine derivs. (II; R1 = Me, cyclohexyl). The structures of all the new compds. were confirmed using FTIR, 1H NMR, and 13C NMR spectral and elemental analyses.

IT 398456-89-8P 398456-90-1P 398456-91-2P 398456-96-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(chemical reactivity of positions N-3, C-5 and C6-Me group in Biginelli type compds. and synthesis of new dihydropyrimidine derivs.)

RN 398456-89-8 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 3-acetyl-1,2,3,4-tetrahydro-6-methyl-4-(3-nitrophenyl)-2-oxo-1-phenyl-, ethyl ester (CA INDEX NAME)

RN 398456-90-1 ZCAPLUS

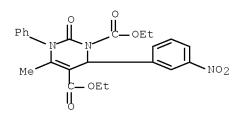
CN 5-Pyrimidinecarboxylic acid, 3-benzoyl-1,2,3,4-tetrahydro-6-methyl-4-(3-nitrophenyl)-2-oxo-1-phenyl-, ethyl ester (CA INDEX NAME)

RN 398456-91-2 ZCAPLUS

CN 5-Pyrimidinecarboxylic acid, 1,2,3,4-tetrahydro-6-methyl-3-[(4-methylphenyl)sulfonyl]-4-(3-nitrophenyl)-2-oxo-1-phenyl-, ethyl ester (CA INDEX NAME)

RN 398456-96-7 ZCAPLUS

CN 1,5(2H)-Pyrimidinedicarboxylic acid, 3,6-dihydro-4-methyl-6-(3-nitrophenyl)-2-oxo-3-phenyl-, 1,5-diethyl ester (CA INDEX NAME)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1998:594082 ZCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 129:269481

ORIGINAL REFERENCE NO.: 129:54755a,54758a

TITLE: Synthesis and characterization of metal chelates with

new pyrimidine derivatives

AUTHOR(S): Siddiqi, K. S.; Nishat, N.

CORPORATE SOURCE: Department of Chemistry, University of Bahrain, Isa

Town, Bahrain

SOURCE: Synthesis and Reactivity in Inorganic and

Metal-Organic Chemistry (1998), 28(8), 1353-1369

CODEN: SRIMCN; ISSN: 0094-5714

PUBLISHER: Marcel Dekker, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

The ligands 4-phenyl-5-ethoxycarbonyl-6-methyl-3,4-dihydropyrimidin-2-one (L1), 1,3-diacetamido(4-phenyl-5-ethoxycarbonyl-6-methyl-3,4dihydropyrimidin-2-one) (L2) and 1,3-dipyrimidinyl(4-phenyl-5- ethoxycarbonyl-6-methyl-3,4-dihydropyrimidin-2-one) (L3) and their metal chelates with 3d metal ions were synthesized. The conductivity measurements suggest that [M(L1)2C12], [M2(L2)C14], [M'2(L2)C16] and [M(L3)2C12] are nonelectrolytes in DMSO and MeCN while [M'(L1)2Cl2]Cl and [M'(L3)2Cl2]Cl are 1:1 electrolytes, where M = Mn(II), Co(II), Ni(II), Cu(II) and Zn(II) and M' = Cr(III) and Fe(III). Spectroscopic studies show that L1 coordinates through NH and the O atom of the pyrimidinyl ring, L2 coordinates through the N and O atoms of the amide group while L3 coordinates via the two N atoms of the pyrimidinone ring. The electronic spectra and the magnetic moments reveal that all metal complexes of L1, L3 and complexes of trivalent metal ions with L2 are octahedral while those of the divalent metal ions with L2 probably have a tetrahedral structure except for the Cu(II) complex which appears to be square-planar. The β values suggest a considerable degree of orbital overlap in the metal-ligand bond.

IT 213592-25-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and complexation with first-row transition-metal ions)

RN 213592-25-7 ZCAPLUS

CN [2,1'(2'H):3'(4'H),2''-Terpyrimidine]-5'-carboxylic acid, 4'-methyl-2'-oxo-6'-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

chloride, (T-4)-(9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

RN 213592-50-8 ZCAPLUS

CN Manganese, dichlorobis[ethyl 6'-methyl-2'-oxo-4'-phenyl[2,1'(2'H):3'(4'H),2''-terpyrimidine]-5'-carboxylate-κN1]-(9CI) (CA INDEX NAME)

PAGE 1-A

RN 213592-52-0 ZCAPLUS

CN Iron(1+), dichlorobis[ethyl 6'-methyl-2'-oxo-4' phenyl[2,1'(2'H):3'(4'H),2''-terpyrimidine]-5'-carboxylate-κN1]-,
 chloride (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

● C1-

- RN 213592-54-2 ZCAPLUS
- CN Cobalt, dichlorobis[ethyl 6'-methyl-2'-oxo-4'-phenyl[2,1'(2'H):3'(4'H),2''-terpyrimidine]-5'-carboxylate- κ N1]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

$$\sqrt{}$$

RN 213592-56-4 ZCAPLUS

CN Nickel, dichlorobis[ethyl 6'-methyl-2'-oxo-4'-phenyl[2,1'(2'H):3'(4'H),2''-terpyrimidine]-5'-carboxylate- κ N1]- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 213592-58-6 ZCAPLUS

CN Copper, dichlorobis[ethyl 6'-methyl-2'-oxo-4'-phenyl[2,1'(2'H):3'(4'H),2''-terpyrimidine]-5'-carboxylate-KN1]- (9CI) (CA INDEX NAME)

RN 213592-60-0 ZCAPLUS

CN Zinc, dichlorobis[ethyl 6'-methyl-2'-oxo-4'-phenyl[2,1'(2'H):3'(4'H),2''-terpyrimidine]-5'-carboxylate-κN1]-, (T-4)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 11 ZCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1976:592595 ZCAPLUS $\underline{Full-text}$

DOCUMENT NUMBER: 85:192595

ORIGINAL REFERENCE NO.: 85:30799a,30802a

TITLE: Formation of heterocyclic compounds by use of N'-diphenylmethylene-N-phenyl-N-trimethylsilylurea

AUTHOR(S): Matsuda, Isamu; Yamamoto, Sakae; Ishii, Yoshio

CORPORATE SOURCE: Fac. Eng., Nagoya Univ., Nagoya, Japan

SOURCE: Journal of the Chemical Society, Perkin Transactions

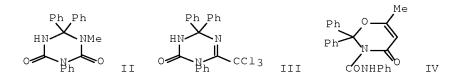
1: Organic and Bio-Organic Chemistry (1972-1999)

(1976), (14), 1523-8

CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal LANGUAGE: English

GΙ



The reactions of the title urea (I) with acceptor mols. were studied. With cyclohexyl isocyanide, MeNCO, MeO2CC.tplbond.CCO2Me, or Cl3CCN followed by desilylation I underwent [4+1] or [4+2] cycloaddn.; imidazolidinone, triazinone, and pyrimidinone derivs. were formed. E.g., I with MeNCO gave the triazinone II. I reacted with RCN (R = CCl3, NMe2) to give the triazinone III and Ph2C:NC(NMe2):NPh, resp., by decomposition of the intermediate silyloxytriphenyltriazine with MeOH or under the reaction conditions, resp. Reaction of I with RR1CO (RR1 = Ph2C; R = H, R1 = CCl3) gave the insertion products Ph2C:NCONPhCRR1OSiMe3. Diketene reacted with I to give the oxazinone IV.

IT 61032-91-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and desilylation of)

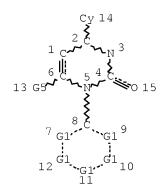
RN 61032-91-5 ZCAPLUS

CN 4,5-Pyrimidinedicarboxylic acid, 1,2,3,6-tetrahydro-2-oxo-3,6,6-triphenyl-1-(trimethylsilyl)-, dimethyl ester (9CI) (CA INDEX NAME)

FILE 'HOME' ENTERED AT 12:37:08 ON 22 SEP 2008

SEARCH HISTORY

=> d stat que 15; d his nofile L1 STR



VAR G1=C/N
VAR G5=C/NH2
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 1
CONNECT IS E3 RC AT 3
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 14
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE L5 397 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 94555 ITERATIONS 397 ANSWERS SEARCH TIME: 00.00.04

(FILE 'HOME' ENTERED AT 12:01:55 ON 22 SEP 2008)

FILE 'REGISTRY' ENTERED AT 12:02:08 ON 22 SEP 2008 L1 STR

L2 8 SEA SSS SAM L1

FILE 'ZCAPLUS' ENTERED AT 12:34:50 ON 22 SEP 2008 L3 3 SEA ABB=ON L2

FILE 'REGISTRY' ENTERED AT 12:34:56 ON 22 SEP 2008

L4 94555 SEA SSS FUL L1 EXTEND L5 397 SEA SSS FUL L1

SAVE TEMP L5 JAI786FULL/A

FILE 'ZCAPLUS' ENTERED AT 12:35:48 ON 22 SEP 2008 L6 11 SEA ABB=ON L5 FILE 'REGISTRY' ENTERED AT 12:36:44 ON 22 SEP 2008 D STAT QUE L5

FILE 'ZCAPLUS' ENTERED AT 12:36:45 ON 22 SEP 2008

D QUE NOS L6

D IBIB ABS HITSTR L6 1-11

FILE 'HOME' ENTERED AT 12:37:08 ON 22 SEP 2008
D STAT QUE L5

=>